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## ASSESSING PUBLIC SECTOR ORGANISATIONS THROUGH PERFORMANCE MEASUREMENT: A COMPARATIVE STUDY OF NEW ZEALAND, SINGAPORE AND UK

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# Assessing Public Sector Organisations through Performance Measurement: A Comparative Study of New Zealand, Singapore and UK

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## INTRODUCTION

From the late 1980's, the governments of New Zealand, Singapore and the UK embarked upon major public sector reforms. These reforms as they were applied to the core public sector and other organisations responsible for public services, were broadly shaped by the principles of `managerialism' or `new public management'. They entailed importing into these organisations business practices associated with the private sector. The `managerialist' reforms in both countries to a certain extent followed a similar path although in some respects they were divergent.

At the heart of both sets of reforms was performance measurement. It was recognised that reforming the civil service or public service along `managerialist' lines required accurate, precise and relevant measurement of the quantity, quality, efficiency and effectiveness of public services and programmes Much work has been undertaken in both countries on how best this can be done. Government departments and other public agencies in New Zealand, Singapore and the UK have developed a range of performance indicators for the key areas of performance measurement and have, in many cases, set yearly targets based on those indicators. As a measure of the commitment to performance measurement and typical of many other departments in New Zealand, Department of Corrections in New Zealand now employees about 100 output quantity and quality indicators (DCNZ 2002).[1] It was also recognised that for performance measurement and target setting to be an effective spur to performance, it was necessary to concomitantly introduce incentives to achieve better performance.

The first part of the paper considers, in light of the reforms in three countries, the main types of performance measurement used, the setting of targets and evaluation of performance results. The second part discusses the limitations and drawbacks of performance measurement as a means for evaluating the work of public sector organisations, which has become evident in the three countries.

## TYPES OF PERFORMANCE MEASUREMENT

In response to the `managerialist' reforms, departments in both New Zealand, Singapore and the UK have been required to greatly expand the number of performance indicators and targets, and to systematically evaluate their results. The indicators and targets cover the entire spectrum of performance. They measure: a) output quantity or volume; b) output quality; c) efficiency; and d) outcomes or effectiveness (Swiss 1991: 139-45; Barrow, 1990; Lewis and Jones, 1990).

Output quantity indicators often measure the number of times a key definable activity is undertaken (e.g. number of inspections conducted), or how many people to whom the service has applied (e.g. the number of offenders in a rehabilitation centre or patients attending a government clinic) (Swiss, 1990: 139-43; DCNZ, 2001: 52; BDS, 1998a: 2;

MOFS, 2002: 309).[2] In Singapore this is done often on a standardised basis, e.g. number of safety inspections per 100 industrial premises (Jones, 1999: 78-83).

Increasingly, in New Zealand, Singapore and the UK, departments have developed indicators which specifically measure the quality or standard of public services. Signifying the commitment to service quality in Singapore has been the employment of quality service managers in departments and the creation of the Service Improvement Unit in the Prime Minister's Office to advise departments on how to upgrade their standards of service (Ibrahim 1996: 32). Widely used service quality indicators in the three countries are those which measure timeliness and promptness in service delivery, accuracy in processing applications and claims and supplying information, and ratings in customer feedback questionnaires (DCNZ 2002: 37-44; BDS 1998a: 2; BDS 1998b; Jones 2001: 489-90; Chua 1996: 18; Straits Times 1995: 1).

Performance measurement may also take into account how efficiently resources are managed. The main indicators of efficiency in the Singapore civil service are, of course, costs per unit of output or service; examples being cost per planning proposal vetted and cost per industrial inspection undertaken by the Pollution Control Department in Singapore (BDS 1998a: 2; MOFS 2002: 249; Jones 2001: 490-92). In some cases, the cost units are the persons who are the beneficiaries or recipients of a service. A measure used by National Health Service Hospital Trusts in UK to determine costs per recipient is average length of time spent in hospital for particular conditions or ailments and the number of delayed discharges.

Another gauge of cost efficiency which is used in New Zealand, as well as Singapore, for revenue generating services, are cost recovery ratios. Efficiency may also be assessed by how often resources are non-productive. An example is number of days lost per officer per year used by the Police Authorities in the UK (HOUK 2003).[3] The number of lost days is applicable as a measure of efficiency to jobs where there may be non-voluntary absenteeism due to injury or stress.

In addition, departments and other agencies in New Zealand, Singapore and the UK have been encouraged to develop indicators which go further than measure outputs and efficiency, and measure ultimate outcomes, showing how effective programmes are in achieving their goals (BDS 1998a: 2; Swiss 1991: 143-5; Chua 1991; Carter 1991: 90). Such outcome measures provide the strategic goals of a department, but require often the collection of an extensive range of data on social and economic conditions (Kibblewhite 2000: 4). For example, in New Zealand and Singapore, the effectiveness of industrial safety programmes are determined through the frequency of industrial accidents and the severity of those accidents (measured by number of working hours lost in consequence) (MOFS 2002: 430; Jones 2001: 492; DLNZ 2002: 28).[4] In UK, the outcome measures for the Police Authorities are crime incidence and crime clear up rates, whist in the National Health Service Hospital Trusts, they include incidence of deaths after hospital operations, the number of emergency readmissions to hospitals after treatment or surgery, the frequency of negligence during treatment or surgery, life expectancy, child mortality rates and cancer survival rates (DHUK 2003; HOUK 2003).[5]

A number of performance indicators in the three countries measure both outputs (either quantity or quality) and outcomes at the same time. In such cases, the quantity or quality of a service automatically determines how effective it is. An example of a dual indicator measuring both output quality and outcome effectiveness adopted by the Prisons Service in Singapore and the Department of Corrections in New Zealand is the incidence of recidivism amongst released prisoners (DCNZ 2002: 57-67).

In the National Health Service Hospital Trusts in UK, a number of dual indicators are used. They include measures of delays in treatment or admission to clinics and hospitals, since the longer it takes to gain admission or be treated the less effective or successful the treatment may be, especially if the condition or ailment requires prompt treatment. Examples are percentage of patients waiting for admission to hospital after 15 months, or waiting outpatient treatment after 26 weeks, percentage of cancer patients waiting treatment after 2 weeks, and the number of cancelled operations (DHUK 2003).

## TARGET SETTING

Performance measurement requires government departments and agencies in the three countries to set targets that cover the entire range of activities within the programmes, and relate to all the four dimensions of performance measurement. Targets are set by identifying the existing level of performance and then determining to what extent if at all, improvements are both possible and necessary. In all three countries public service targets are in the main quantified with single target number or a target range provided. However, in a few cases in New Zealand targets are qualitative, expressed as a discrete event or expected achievement without quantification. For example, in Ministry of Agriculture and Forestry, New Zealand, two important qualitative targets are presenting New Zealand's interests in international forums agriculture and food and preparing policy advice on strategic water issues (MAFNZ 2002).[6]

In calculating what the target should be, several criteria are taken into account. These are benchmarking with other countries or areas, previous performance usually with a small upward adjustment, identifying needs and demands of public, and organisational capacity (determining how far the resources of the organisation permit target accomplishment).

In New Zealand the use of overseas benchmarks is especially important. For example the Department of Corrections bench marks its targets for such indicators as prisoner - staff ratios, cost per prisoner per day, incidence of assaults in prison, unnatural deaths amongst prisoners with other jurisdictions. The other jurisdictions are Canada, different states of Australia, England and Wales, Scotland and Canada (DCNZ, 2002). In Singapore a similar reference to international standards determines targets set by the Pollution Control Department of the Ministry of the Environment. (in relation to the percentage of days in the year when Pollution Standards Index is below 50) and Department of Industrial Safety (in relation to the number of accidents per million man-hours worked), which would 'ensure the safety standards of the work environment are comparable to the best in the developed countries'(DIS, 2001: 1; MOFS, 2002: 458; Jones 2001: 494).

In Singapore, the availability of human and technological resources and the extent they can be better used are also key determinants of targets. If more staff are made available in the department or agency, more advanced forms of automation and computerisation introduced, procedures streamlined and the overall organisation improved, then higher output targets may be set in terms of both workload and service quality. For example, the Department of Industrial Safety raised its target of industrial inspections by 3,500 in 1998, an increase of 45 per cent, which it was able to achieve. The higher target which was set and achieved was made possible in part by the recruitment of more staff, with the Department's establishment increasing by 22 per cent in 1998. Improvements in technology, streamlining of procedures and better organisation also make it possible to set lower unit costs and so make efficiency savings (Jones 2001: 493).

In the three countries, the risks in not achieving targets set are identified at the outset, especially if they relate to factors outside the control of the department or agency, such as

external factors or limited organisational capacity. For example, for the projections of air quality in Singapore based on the pollutant standards index in 1998 and 1999, were not achieved as a result of forest fires in neighbouring Indonesia (PCDS: 2001: 28-9).[7]

Although there may be a presumption that performance targets should be improved, in many cases further improvement is difficult if not possible. Indeed, where significant advances have already been made, it becomes increasingly more difficult to continue to accomplish ever higher targets, and there is a natural point where higher targets can no longer be set, especially within existing resource availability. For example, improved time targets for processing passport, visa and pass application were set five years, resulting in significant reductions in the processing period, but in the last two to three years these timeliness targets have hardly changed (MOFS, 2002: 369).

## PERFORMANCE CONTRACTS

In all three countries service delivery agencies are required to set their indicators and targets within a contract drawn up with parent authority. In the case of New Zealand this is usually the minister responsible for that agency or department; in Singapore it is the Ministry of Finance, and in UK either The Treasury or a relevant monitoring or regulatory body.

The best illustration of a performance contract is the annual purchase agreement in New Zealand (sometimes called the purchase contract) between a department and the responsible minister. Under it, the department gives an undertaking each year to deliver a pre-specified (ex ante) quantity and quality of outputs to meet the performance outcomes set by the minister. Related outputs are presented as part of an output class or programme, with each class sub-divided into specific outputs. In return, the minister provides a budget approved by parliament to enable those outputs to be delivered. In so doing the minister is in effect acting as a purchaser of the outputs on behalf of parliament and the tax payer. The purchase agreement also includes the scheduling of the delivery of the outputs, the system for monitoring performance and the gathering and verifying of results, procedures for amending and updating the agreement if that is necessary during the year, and consideration of the possible risks that may impair the accomplishment of targets. While a good deal of time and preparation is required in drafting a purchase agreement, it can only be finalised after the departmental estimates have been passed by parliament (Palmer and Palmer 1997: 81-2, 112-14; Schick 1996: 7-8; Boston, Martin, Pallot and Walsh 1996: 274-8).

The financial and output performance of a department in New Zealand is subject to assessment from a number of quarters. These include the Office of the Controller and Auditor-General and the Finance and Expenditure Committee of Parliament. They undertake a value for money audit of each department focusing upon possible inefficiency and waste in the spending of money, as well assessing the outputs accomplished. (Palmer and Palmer 1997: 101, 104-07; Boston et al 1996:303). In addition, the State Services Commission assesses the performance of departments. It does so not just through the performance results, but also from feedback received from a range of personnel in both the government and the public service, including a self-assessment by the chief executives themselves (Boston et al 1996: 114-17; Scott 1996: 32).

## EVALUATION OF RESULTS AND ACCOUNTABILITY

In both New Zealand and Singapore, performance results are evaluated simply in terms of how far a target has been accomplished, although in New Zealand the evaluation includes comments about factors outside the control of the department which has affected

performance. As an example, the failure of the Department of Correction in NZ in 2001 to meet the target for the number of parole board reports was explained by the fact that this was demand driven, and the anticipated demand for these reports did not arise

In the UK evaluation is more comprehensive and is done in four ways. Firstly, a number rating system (e.g. 1 to 5) to evaluate target accomplishment for specific indicators is used, one example being the rating system used in the evaluation of National Health Service Hospital Trusts. In addition, star ratings are employed to evaluate overall performance of National Health Service Hospital Trusts (1 to 3 stars) (DHUK 2003). Where there are multiple agencies delivering the same service in different localities, evaluation is undertaken on a relative basis. The most common relative evaluation is rank ordering (the use of the league table). This is done for schools, universities and colleges, Local Education Authorities and Police Authorities, as well as National Health Service Authorities and Hospital Trusts. Another form of relative evaluation is comparison with mean scores within a relevant cohort of agencies. Police Authorities in UK are assessed in this way. Performance results such as crime rates and clear up rates are compared with the average scores amongst Police Authorities in localities of a similar character (economically and socially) (HOUK 2003).

## LIMITATIONS AND DRAWBACKS OF PERFORMANCE MEASUREMENT

In New Zealand, Singapore and UK, performance measurement and evaluation have encountered certain limitations and drawbacks. In some cases the problems that have arisen are inherent within performance measurement of public services per se, but others are avoidable with a better system of performance measurement. The problems may be categorised as follows: shortcomings in measurement and interpretation, problems of attribution, lack of balance in the range of indicators, and detrimental effects of performance measurement upon the job roles and attitudes of public servants.

### Measurement and interpretation

When performance measurement is undertaken, it is necessary that measurements are precise, accurate, and where possible quantifiable. The main drawback with performance measurement in the public services, as experienced in New Zealand, Singapore and the UK (as well as in other countries), is that many of the outputs and outcomes of public services are not commensurable with precision and accuracy resulting in vague and overly general measures. These includes certain line services as well as the core staff services of personnel administration, accounting, legal services, and policy advice.

An example of a vague or overly general indicator in Singapore is an output quality indicator used by the Singapore Meteorological Service measuring the percentage of weather forecasts which are 'accurate' (MOFS 2002: 98). This begs the question: what is an accurate weather forecast. In the New Zealand public service similarly vague and subjective criteria are used in part to assess the quality of information services. Typical are the reports on prisoners submitted by the Department of Corrections to the courts, District Prison Boards and Parole Boards. Amongst the criteria are whether the reports were 'concise, logical and grammatically correct', included 'all relevant and appropriate information', contained information which was 'well-documented and verified', provided 'a clear statement of recommendations for further intervention', and were of a standard that 'complies with the Code of Ethics of the New Zealand Psychological Society' (DCNZ 2002: 38, 43). The problem is that such criteria are largely imprecise, ill-defined, and subjective, and defy anything like objective measurement. In the National Health Service Hospital

Trusts in UK, an important measure of standard of service of a hospital is cleanliness. But this raises the question about how cleanliness is enumerated (DHUK 2003).

A further concern drawn from the New Zealand and Singapore experiences is the use of indicators based on non-uniform units of measurement. This often happens when the outputs in question are difficult to measure, making it difficult to interpret the results. An example is the measurement of output quantity for ministerial services used in the New Zealand public service. This is done by enumerating the numbers of replies drafted by public servants to letters sent to ministers, and to requests from ministers themselves for information. Also included are the number of answers drafted by public servants for ministers in reply to parliamentary questions. In FY2001/02, officials in the Ministry of Agriculture and Forestry in New Zealand with responsibility for ministerial support drafted 1,041 letters in reply to correspondence sent to the minister (the target was 1,000-1,400 letters) and 308 answers to parliamentary questions (the target was 170 questions) (MAFNZ 2002: 62-3). The problem is that the units of measurement are of course far from uniform. Such letters or replies may vary a great deal in length and detail. In addition, whilst some may be readily answered with available information, others may only be answered after a lengthy process of fact finding. Thus it is difficult to gain even a rough appreciation of how much work was involved and working hours spent.

A further problem of interpretation has arisen in the case of the outcome results of certain enforcement activities. A key outcome indicator for all types of enforcement work is the extent of compliance to laws and regulations measured by the frequency of violations. If most violations are identified and reported, then their frequency is an accurate gauge of compliance. Where offences committed cause immediate or direct harm to others, they are likely to be reported by the victim or another concerned individual. However, where violations do not often cause immediate or conspicuous harm to others, what may be termed 'victimless' offences, they may remain unreported and may only be identified by surveillance activities of the enforcement department. Examples are breaches of laws and regulations in such areas as environmental protection, public health, food safety, agriculture and industrial safety. If recorded offences rise, this may indicate more vigilant surveillance rather than declining compliance. If they fall, the reverse could be true. For example, in Singapore recorded infringements of industrial safety regulations dropped markedly from 90 infringements per 100 industrial establishments in 1987 to 39 in 1998. Similar declines occurred in the violations of pollution and food safety regulations (Jones 1999: 107-10). However, over the same period the degree of surveillance also declined; so the figures may not necessarily indicate that the extent of compliance was increasing. In the case of the enforcement programme in Singapore to curb Aedes mosquito breeding, the number of violations of the relevant regulations over the last ten years has increased but the conclusion that compliance has declined has to be qualified by the extent to which surveillance has been stepped up (Jones 1999: 120). Such difficulties of interpretation would, of course, be encountered in similar enforcement programmes in other countries.

Where indicators are too general, vague and subjective or for which the results are difficult to interpret, the assessment itself becomes subjective, making it easier for departments to claim that targets and goals were achieved, and less easy for external assessors to prove otherwise. This perhaps explains in part the high success rate claimed by most departments in New Zealand in recent years in achieving the goals and targets set. Adding to the success is the possibility that targets are perhaps set in such a way as to ensure that they can be readily achieved, especially if the purchasing minister has only a limited appreciation of what a department's delivery potential is. It may thus be necessary to evaluate with some caution performance results indicating a high success rate.

### Attribution

In two aspects of performance measurement, the question arises about how much the results can be attributed to the department in question. Firstly, outcome measurement may be hampered by the fact that that they are influenced by a range of factors often outside the control of a department (Kibblewhite 2000: 7; Schick 1996: 2). An example is the Pollution Control Department in Singapore. A key indicator of its effectiveness is the pollutant standards index, which measures air quality. Its target in 1997 was to achieve an index reading of 50 or less in 60 per cent of the days of that year. As it turned out, this reading was only recorded in 48 per cent of the days. An important reason why it fell short of this target was the extensive forest fires in neighboring Indonesia during 1997, which caused widespread air pollution throughout Southeast Asia (MOFS 1998: 269; BDS 1998a: 2; MENVS 1998: 8).[8] Since then, air pollution resulting from forest burning in Indonesia has from time to time recurred although to a much less serious extent. Thus, the outcome observed may not always be attributed to and so be indicative of the effectiveness of the service provided. It should be noted that the Pollution Control Department has attempted to refine its outcome assessment by giving greater weight to the pollution standards index at times of the year when the pollution from Indonesia is minimal. Similar problems arise in measuring effectiveness of police authorities in terms of the incidence of crime, which is affected often by social and economic conditions, such as the rate of unemployment and family break down.

The second area of performance measurement where attribution must be qualified are the volume outputs for demand driven services, which are often beyond the control of the department concerned. Examples in Singapore are the output of the schools programme of the Ministry of Education, and the workload of both the Registration Department dealing with the registration of births and deaths, and the Registry of Marriages, which are all influenced by demographic and social changes. In such cases, increases or decreases in demand outside the department's control are the more salient determinants of outputs. In some cases, it may even be difficult to make predictions of the demand over the forthcoming year and so set appropriate targets. It is well known fact that amongst the Chinese population in Singapore marriages and births can be affected by whether a particular year within the Chinese tradition is auspicious. All this limits the usefulness of such volume output measures in assessing the performance of the department (BDS 1998a: 2).

### Lack of balance in the range of indicators used

In the three countries, certain aspects of performance measurement have not been adequately developed, leading to noticeable imbalances in the range of indicators used. In both countries, as in other countries which have adopted comprehensive systems of performance measurement, important elements in service delivery such as fairness, impartiality, effective problem-solving, and appropriate exercise of discretion, which are not measurable, are given little consideration in output measurement and assessment and yet are vital in many services, such as housing, welfare, and enforcement programmes (Gregory 2000: 8-9; Kibblewhite 2000: 6-7; SSCNZ 1999a: 5, 9, 22).[9] Even in inspection and scientific testing , little consideration is given to the non-measurable aspects of these tasks such as the thoroughness, rigour and professionalism with which they have been undertaken.

In Singapore, whilst output quantity and efficiency indicators are numerous, the range of the quality indicators is quite small. Most of them are generic measuring

timeliness, client or customer satisfaction and in some cases accuracy of information. as already mentioned, with only a few which are service specific indicators. By contrast in New Zealand much work has gone into developing service specific quality measures of varying degrees of precision, but there has been surprisingly little priority given by comparison to Singapore to measuring efficiency through unit output costs and output costs as percentages of total expenditure within a department.

In both countries the main imbalance is though between the output and outcome indicators. In New Zealand, this has given rise to a significant critique of its model of public management amongst both local public service leaders and academics. Despite the priority given to determining output quantity and quality, outcome specification and assessment remain weak, demonstrated by the lack of a sufficient range of specific outcomes indicators commensurate with the wide range of outputs that are built into performance and purchase agreements. Outcomes where they are stated, with certain exceptions, tend to be couched in such broad terms as to become almost truisms, and are applied in a one peg fits all manner to a wide ambit of outputs or output classes in the same department. The problem is that when outcome indicators are stated in broad all-encompassing terms it is difficult to determine what are precisely the desired outcomes to be measured and how much of each has been achieved. This makes it doubly difficult to then evaluate output performance, since the key criterion for the appraisal of an output is whether it contributes to a desired outcome, and if it has not, whether the failure is due to the nature of the service itself, or to the quantity or quality of the output (Gregory 2000: 7-8; Gill 2000: 5-6, 8; Gregory 2000: 7-8; Kibblewhite 2000: 2, 6, 11; Scott 2000; CAGNZ 2002: 54, 59, 61-2; SSCNZ 2002: 10; SSCNZ 1999a : 21; SSCNZ 1999b: 2-10).[10]

This applies also to outputs from policy advice to ministers as indicated in the results of a survey by the New Zealand State Services Commission in 1998/99, showing that only 7 per cent of policy proposals were subject to ex-post review based on outcome impact. Furthermore, since ministers are primarily responsible for policy outcomes, the lack of sufficient outcome assessment makes it difficult to evaluate their performance, so weakening their accountability. Indeed it has been suggested that ministers are not particularly forthcoming in clarifying outcomes and conveying them to chief executives (Gill 2000: 5-6, 8; Scott 2000; SSCNZ 1999b: 4-5).

The limitations of outcome specification and measurement are illustrated by the Ministry of Agriculture in New Zealand. The outcomes stated for many of its programmes are to contribute to strong economic growth, promote external linkages, and to protect and enhance the environment. Whilst these are legitimate overall goals of the ministry, as they stand they do not provide the basis for outcome measurement. More useful measure of outcomes would be the growth in agricultural production and exports, gains in agricultural productivity, the creation of new agricultural businesses and adoption of new technologies, and the reduction in the amount of soil erosion, or pollution of water courses. For some if not all of these outcomes, specific and even quantifiable measurement may be possible and quantifiable targets could be set (MAFNZ 2002: 43-120).

In Singapore too there is scope for improvement in measuring outcomes and making departments accountable for them. General goals are set for each ministry, which in some cases are reasonably informative and indicate the basic framework of policy. Others though are so broad as to be simply self-evident and of little informative value. Only in a few departments and programmes are specific and quantifiable outcomes stated. Amongst these are the Department of Occupational Safety (frequency and severity of industrial accidents), the Division of Environmental Health in the Ministry of the Environment (incidence of environmentally related diseases) and the Pollution Control Department (indices of pollution

in the atmosphere, water courses and coastal waters). However, even for such outcomes, accountability for the results achieved is not made explicit (MOFS 2002: 240, 249, 430).

The reasons for the imbalance are not hard to find. Outcomes are often not readily commensurable, and even more difficult to quantify. As already mentioned many factors influence outcomes outside the control the programme concerned, so creating in particular an obvious aversion to setting outcome targets and be held to account for achieving them. In addition, developing outcome indicators and measuring outcome performance requires that much more information be gathered and detailed analysis be undertaken concerning social, economic and other trends. However, the obstacles are not insurmountable. Whilst it may be impossible to identify a specific outcome for some public services, for others it is possible. Moreover, regardless of whether or not appropriate outcome targets can be set, relevant and detailed ex post data may be gathered to signify outcome performance, allowing informative judgments to be made on the effectiveness of output programmes (Gill 2000: 13-14; Kibblewhite 2000: 4).

**The use of relative evaluation in performance measurement**

As mentioned above, public agencies may be measured and evaluated relative to other agencies delivering the same service according to geographical area. This usually involves comparing performance results of an agency with the mean score of all the agencies, and/or establishing a rank order or league table. Relative measurement has been favoured in particular in the UK. Two concerns arise with this approach to performance evaluation. One is that an improvement in performance of one agency can only be at the expense of other agencies, even if the latter have also improved. Secondly, in some areas the social and economic conditions may be conducive to high performance scores whilst in other areas they may not be. This applies to education and policing in particular. Relative or comparative measurements such as league tables may disguise these external factors that impinge upon agency performance, and may thus result in unfair comparisons and rankings.

**Effects upon the job roles and attitudes of public servants**

From the New Zealand and Singapore examples, the performance measurement process increases the workload for senior managers in departments, which now must include developing indicators, setting targets, compiling statistics, and analysing and presenting those statistics for the purpose of assessment. This may lead to work overload and a significant diversion from the mainstream tasks which managers are required to carry out.

Adding to the workload effects of performance measurement is the encouragement it gives to expand output activities regardless of how necessary or worthwhile they may be. In simple terms, the more output quantity produced the better the organisation appears in its performance assessment. If the additional output is not necessary, then it simply amounts to a waste of resources. Am example is the increase in surveillance work in various enforcement programmes in Singapore in the late 1990's, possibly in response to performance measurement under Budgeting For Results (Jones 1999: 120-1).

Likewise in New Zealand it has been suggested that outputs have become ends in themselves, resulting in the desire to accomplish or exceed targets without consideration of the ultimate benefits. It has been argued that regard for targets as ends in themselves, especially when they are written into formal contracts or plans, is akin to the conformity to rules characteristic of traditional bureaucracy with the same effect, viz. goal displacement - consequences which ironically new public management was intended to overcome (Gregory 2000: 3-10; SSCNZ 1999a: 20).

In addition, output measurement of policy advice and ministerial services in ministries and departments in New Zealand may have altered the relationship between ministers and senior public servants, especially chief executives, since the quality of the advice and services provided are measured by their acceptability to the minister. For example, in the Ministry of Agriculture and Forestry, the measure of the quality of the policy advice is that it be `to the satisfaction of the Minister as assessed by a bi-annual questionnaire.' (MAFNZ 2002:48). In replies to letters to the minister, the quality service target is that `95% are acceptable for the Minister's signature without amendment' (MAFNZ 2002: 62-3). The results show that in the recent years nearly all the quality service targets for policy advice and ministerial services across a range of ministries and departments based on acceptability to the minister were accomplished. This is not surprising since the measures probably encourage public servants to give advice and provide briefings and answers which suit the political and party interests of ministers. This could undermine their traditional and important role as sources of impartial and independent advice.

An additional concern that has emerged in New Zealand is that performance measurement and other aspects of the new public management model may reduce the possibility for coordination between different departments with related or overlapping functions. Such coordination may be perceived as diverting the department from accomplishing its own particular output targets. Moreover, since the model treats departments as separate entities subject to different agreements and encourages them to have regard for their own interests, the upshot has been a m ore fragmented public service lacking the unified ethos of service and commitment that it previously enjoyed (Gregory 2000: 20; Gill 2000: 6-7, 10; Kibblewhite 2000: 7-9, 12).

## CONCLUSION

Performance measurement has conferred significant benefits upon the public service in New Zealand, Singapore and UK. Public service managers have a more focused understanding of the work their departments are required to undertake, and the levels of performance their departments are expected to achieve. It also provides more detailed information of what has been achieved throughout the financial year. This is a step forward in improving accountability and transparency in the public services of both countries.

However, offsetting these gains are major drawbacks in performance measurement which have been encountered in the three countries, as indicated above. Not least of these are the misleading results when attempts are made to measure non-commensurable activities (especially if measurement entails quantification), the misleading impressions that can be gained from relativity measurement and the lack of comprehensive and informative outcome assessment. However, two dilemmas arise: whilst outcome assessment is essential to the improvement of performance measurement many outcomes are not exclusively attributable to a department or programme. In addition, outputs which are difficult to measure are often a vital aspect of a public service. In such cases, it is preferable to undertake a detailed qualitative analysis of the relevant evidence which may enable informative judgements to be made on how well a service has been provided.

## NOTES

1. DCNZ in the in-text citations refers to the Department of Corrections, New Zealand.
2. BDS in the in-text citations refers to the Budget Division , Ministry of Finance, Singapore; MOFS in the in-text citations refers to the Ministry of Finance, Singapore.

3. HOUK in the in-text citations refers to the Home Office, United Kingdom.
4. DLNZ in the in-text citations refers to the Department of Labour, New Zealand.
5. DHUK in the in-text citations refers to the Department of Health, United Kingdom.
6. MAFNZ in the in-text citations refers to the Ministry of Agriculture and Forestry, New Zealand.
7. PCDS in the in-text citations refers to the Pollution Control Department, Singapore.
8. MENVS in the in-text citation refers to the Ministry of the Environment, Singapore.
9. SSCNZ in the in-text citations refers to the State Services Commission, New Zealand.
10. CAGNZ in the in-text citations refers to the Controller and Auditor General, New Zealand.

**REFERENCES**


Barrow, Michael (1990) 'Techniques of Efficiency Measurement in the Public Sector', Martin Cave, Maurice Kogan and Robert Smith eds., *Output and Performance Measurement in Government: the State of the Art*, London: Jessica Kingsley.

Boston, Jonathan, Martin, John, Pallot, June, and Walsh, Pat (1996) *Public Management: the New Zealand Model*, Auckland: Oxford University Press.

Budget Division, Ministry of Finance, Singapore (1996) 'Budgeting For Results - Implementation Framework', *Budget Notes, 2,* Singapore: Budget Division, Ministry of Finance.

Budget Division, Ministry of Finance, Singapore (1997) *Autonomous Agencies: FY1996 Performance Review,* Singapore: Ministry of Finance.

Budget Division, Ministry of Finance, Singapore (1998a) *Budgeting For Results Manual for the Singapore Civil Service*, Singapore: Ministry of Finance.

Budget Division, Ministry of Finance, Singapore (1998b) *Autonomous Agencies: FY1997 Performance Review,* Singapore: Ministry of Finance.

Carter, N. (1991) 'Learning to Measure Performance: the Use of Indicators in Organizations', *Public Administration,* 69: 85-101.

Controller and Auditor-General, New Zealand (2002) *Report of the Controller and Auditor General: Reporting Public Sector Performance*, Wellington: Audit Office.

Chua, G. W. (1991) 'Management Accounting in the Civil Service', paper given to conference, *Budget Management: the Next Lap*, Singapore .

Chua, L. H. (1996a) 'What New Buzzwords in the Civil Service Mean', *Straits Times*, 16 March 1996, Singapore.

Department of Corrections, New Zealand (2002) *Department of Corrections Annual Report, 2001/02*, Wellington: Department of Corrections.

Department of Health, UK (2003) *NHS Performance Indicators*, London: Department of Health: available at http://www.doh.gov.uk/nhsperformanceindicators

Department of Labour, New Zealand (2002) *Department of Labour Annual Report, 2001/02*, Wellington: Department of Labour.

Gill, D. (2000) 'The Grass is Always Greener on the Other Side of the Fence: NZ Experience with Public Management Reform', paper given to workshop *New Zealand Public Management: Lessons Learned and Future Developments*, Wellington, March 2000.

Gregory, Bob (2000) 'Getting Better and Feeling Worse? Public Sector Reform in New Zealand', paper given to workshop, *New Zealand Public Management: Lessons Learned and Future Developments*, Wellington, March 2000.

Home Office, UK (2003) *Policing Performance Monitors*: available at http://www.policereform/performance_monitors

Ibrahim, Z. (1996) 'Why the Public Service Push to Provide Quality Service', *Straits Times*, 6 May 1996, Singapore.

Jones, D. (1999) 'Changes in Surveillance in Regulatory Enforcement Programmes in Singapore', in *Asian Journal of Political Science*, 7, 2 (December): 100-20.

Jones, D. (2001) 'Performance Measurement and Budgetary Reform in the Singapore Civil Service', in *Journal of Public Budgeting. Accounting and Financial Management*, 13, 4 (Winter): 485-511.

Kibblewhite, Andrew (2000) 'Effectiveness: The Next Frontier', paper given to workshop, *New Zealand Public Management : Lessons Learned and Future Developments*, paper given to workshop *New Zealand Public Management: Lessons Learned and Future Developments*, Wellington, March 2000.

Lewis, Sue, and Jones J. (1990) 'The Use of Output and Performance Measure in Government Departments', in Martin Cave, Maurice Kogan and Robert Smith (eds.), *Output and Performance Measurement in Government: the State of the Art*, London: Jessica Kingsley.

Ministry of Agriculture and Forestry, New Zealand (2002) *Annual Report of Ministry of Agriculture and Forestry, 2001/02*, Wellington: Ministry of Agriculture and Forestry.

Ministry of the Environment, Singapore (1998) *Ministry of the Environment Annual Report, 1997,* Singapore, Ministry of the Environment.

Ministry of Finance, Singapore (1998) *The Budget for the Financial Year 1998/99,* Cmd. 2, Singapore: Ministry of Finance.

Ministry of Finance, Singapore (2002) *The Budget for the Financial Year2002/03,* Cmd. 3, Singapore: Ministry of Finance.

Palmer, Geoffrey, and Palmer, Matthew (1997) *Bridled Power: New Zealand Government under MMP*, 3rd ed., Auckland: Oxford University Press.

Schick, Allen (1996) *Spirit of Reform: Managing the New Zealand State Sector in a Time of Change*, pt. 7: *Accounting For Results*, Special Report, Wellington: State Services Commission.

Scott, G. (1996) *Government Reform in New Zealand*, Washington: IMF.

Scott, G. (2000) 'Public Management in New Zealand: Learning from Experience', transcript of keynote address to workshop *New Zealand Public Management: Lessons Learned and Future Developments*, Wellington, March 2000.

State Services Commission, Singapore (1998) *Annual Report of the State Services Commission, New Zealand, 1997/98*, Wellington: State Services Commission.

State Services Commission (1999a) *Improving Accountability: Setting the Scene*, Occasional Paper no.10, Wellington: State Services Commission.

State Services Commission, New Zealand (1999b) *Looping the Loop: Evaluating Outcomes and Other Risky Feats*, Occasional Paper no. 7, Wellington: State Services Commission.

State Services Commission, New Zealand (2002) *Annual Report of the State Services Commission, New Zealand, 2001/02*, Wellington: State Services Commission.

Straits Times (1995) 'Reward for Civil Servants at Counters', Report, 25 July 1995, Singapore.

Swiss, J. (1991) *Public Management Systems: Monitoring and Managing Government Performance*, Englewood Cliffs: Prentice-Hall.